

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Hidehiro UCHIMI et al.) Group Art Unit: 2834
Application No. 10/539,036) Examiner: Burton S. Mullins
Filed: 12/22/2003) Confirmation No. 5999
For: VIBRATION-GENERATING SMALL) Date: August 28, 2009
MOTOR AND PORTABLE
ELECTRONIC APPARATUS

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INTRODUCTORY COMMENTS

This is an appeal brief filed pursuant to the Notice of Appeal and Pre-Appeal Brief Request for Review filed June 10, 2009, and to the final Office Action dated December 10, 2008, in which claims 29, 30, 35 and 36 are rejected and claims 31-34 and 37-40 are objected to in the above-identified application.

I. REAL PARTY OF INTEREST

The real party of interest is the assignee of record: Namiki Seimitsu Houseki Kabushiki Kaisha (Tokyo, JAPAN).

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. However, as noted in the Amendment filed November 27, 2007, claim 29-34 of the present application are substantially identical to claims 1, 2, 4, 6, 7, and 18 of *Takagi et al.* (U.S. Patent No. 7,023,114 – hereinafter *Takagi*), which have been examined and allowed by the U.S. Patent and Trademark Office. An interference proceeding is likely to be declared with *Takagi* upon the allowance of the pending claims the above-identified application.

III. STATUS OF CLAIMS

A. Status of Claims in Proceeding

Claims 29-40 are currently pending in the application. Claims 1-29 have been cancelled.

Claims 29, 30, 35, and 36 are rejected under 35 U.S.C. §102(b), and claims 31-34 and 37-40 are objected to as being dependent upon a rejected base claim.

B. Identification of Appealed Claims

Claims 29, 30, 35, and 36 are being appealed. A copy of all of the pending claims as presented in the amendment filed February 23, 2007 is included in the attached Appendix I.

IV. STATUS OF AMENDMENTS

There are no pending amendments of the claims. The last Response/Amendment/Request for Reconsideration was filed on March 10, 2009, of which entry was acknowledged in the Advisory Action dated March 18, 2009.

Claims 29-40 are pending.

V. SUMMARY OF CLAIMED SUBJECT MATTER

For the purposes of appeal, the 35 U.S.C. §102(a) rejection of independent claims 29 and 35 and their respective dependent claims 30 and 36 is appealed.

Independent claim 29 is directed to a vibration motor comprised of a motor body (e.g., external housing case 3 described in paragraph [0065] of the specification), a motor shaft (i.e., spindle 12 as shown in paragraph [0079]) projecting from the motor body, an eccentric weight (i.e., 16 as shown in paragraph [0079]) attached to the motor shaft (12), and an attaching means (i.e., holder 33 as shown described in, e.g., paragraph [0091] and Fig. 3a) for supporting said motor body in a horizontal prone posture at one surface of a board (i.e., board 50 as shown described in, e.g., paragraph [0091] and Fig. 3a), wherein the attaching means has a pair of attachment faces (i.e., 33e shown in amended paragraph [0091] filed November 5, 2008 and in amended Fig. 3a filed May 29, 2008) straddling said motor shaft (12) and extending in parallel with the same at the two sides of a motor case (3) and a plane (Fig. 3a) including said pair of attachment faces (33e) intersects with a circular orbit of the outermost point of the eccentric weight (16) at two points, as shown in Fig. 3a and explained in great details hereinafter.

Claim 30 recites a vibration motor as set forth in claim 29, wherein parts of said pair of attachment faces are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

Independent claim 35 of the present invention is directed to a vibration motor comprised of a motor body, a motor housing (e.g., external housing case 3 in paragraph [0065] of the specification), a spindle (i.e., spindle 12 as shown in paragraph [0079]) projecting from the motor housing (3), an eccentric weight (i.e., 16, as shown and described in Fig. 3a and paragraph [0079]) attached to the spindle (12), and an attaching means (e.g., 33, 33a, 33c, 33e) for supporting said motor housing in a horizontal prone posture at one surface of a board (i.e., board 50), wherein the attaching means has a pair of attachment rails (i.e., 33c as shown

described in, e.g., paragraph [0091] and Fig. 3a) straddling said spindle (12) and extending in parallel with the same at the two sides of a motor housing (3) and a plane including said pair of attachment rails (33c) intersects with a circular orbit of an outermost point of the eccentric weight at two points, as shown in Fig. 3a and explained in great details hereinafter.

Dependent claim 36 is directed to a vibration motor as set forth in claim 35, wherein parts of said pair of attachment rails are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 29, 30, 35, and 36 stand rejected under 35 U.S.C. §102(a) as being anticipated by *Narusawa* (US 6,081,055).

VII. ARGUMENT

As discussed in detail below, the basis for the rejection of claims 29, 30, and 35 and 36 does not amount to a case of anticipation for the combination of subject matter recited in the rejected claims.

Claimed features are supported at least in the original drawings, and claims are to be given their broadest reasonable interpretation that is consistent with the specification.

The Examiner fails to interpret the claim language properly and, therefore, applied an unreasonably broad interpretation of the above-mentioned claimed features.

Claims 29-34 of the present invention are identical to claims 1, 2, 4, 6, 7 and 18 of U.S. Patent No. 7,023,114 to *Takagi* issued by the U.S. Patent and Trademark Office, and, therefore, at least claims 29-34 should also be allowed.

1. Claim Rejections under 35 U.S.C. §102(a)

Claims 29, 30, and 35 and 36 stand rejected under 35 U.S.C. §102(a) as being anticipated by *Narusawa* (US 6,081,055) in the Final Office Action dated December 10, 2008.

A. Pertinent Law

As set forth in the MPEP, “to anticipate a claim, the reference must teach every element of the claim.” (MPEP §2131). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913,

1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

B. The *Narusawa* patent does not anticipate claims 29, 30, and 35 and 36

Reversal of the rejection of claims 29, 30, and 35 and 36 is respectfully requested on the basis that *Narusawa* fails to describe of each and every element recited in independent claims 29, 30, and their respective dependent claims 35 and 36.

Amended paragraph [0091] of the specification filed with the Amendment of May 29, 2008 reads:

[0091] In FIG. 3, a reference numeral **33** denotes a holder that covers the outside of the external housing case of the motor; the inside of the holder is formed in essentially the same shape as the outside of the external housing case **3**, and there are provided rails **33c** in the form of U-shaped grooves running along the outside. The holder **33** may be alternatively referred to as an attachment means. The holder **33** includes a leg connecting part **33d**, as shown in Fig. 4, and a pair of attachment faces **33e**, as shown in Fig. 3. The pair of attachment faces **33e** rest on the circuit board **50**. There are provided extensions **33a**, **33b** of the holder **33** that project on both sides of the U-shaped rail **33c**. A cut-out from the circuit board **50**, as shown in (b) of the figure, is inserted into the groove-shaped rails **33c**, **33c**; this suspends the holder **33** and at the same time connects the terminal blades **4a**, **4b** of the power supply terminal **4** to the power supply lands **55**. Then the circuit board and all are accommodated in the mounting position by the partition walls within the equipment case of the portable electronic equipment, as shown in FIG. 4 and, finally, the extensions **33a**, **33a**

and **33b**, **33b** of the holder **33**, together with the circuit board **50**, are clamped in place by the partition walls of the other side of the equipment case **100** of the electronic equipment. By this means, the vibrating motor **1** is fixed in place within the portable electronic equipment.

The Examiner contends that the holder frame 30 having holding spring pieces 33 of *Narusawa* is equivalent to the attachment means and a pair of attachment faces of the presently claimed invention. Specifically, the examiner interprets Appellant's attachment means as anticipated by the "attachment" between the holder frame 30 and motor 20 of *Narusawa*.

Further, the examiner contends *Narusawa* discloses holder frame 30, a pair of "attachment faces" (holding spring pieces) 33 straddling motor shaft 22 and extending in parallel with the two sides of the motor case 20 such that they receive and grip (i.e., attach) motor body 20.

In response to the above-summarized contention by the Examiner, Appellant respectfully notes that the attachment means and the pair of attachment faces disclosed in amended paragraph [0091] and shown in, e.g., Fig. 3a of the specification and recited in each of claims 29 and 35 of Appellant's vibration motor are structurally and functionally different from the holder frame 30 and its holding spring pieces 33, as shown in Figs. 3C-3D and Figs. 5C-5D of *Narusawa*.

Appellant further respectfully asserts that the examiner's interpretation of a "attachment" in *Narusawa* does not meet Appellant's claimed feature wherein attaching means has a pair of attachment faces (i.e., 33e) straddling said motor shaft and extending in parallel with the same at the two sides of a motor case and a plane including said pair of attachment faces intersects with a circular orbit of the outermost point of the eccentric weight at two points, as recited in claim 29.

Further, Appellant respectfully asserts that such an interpretation of a "attachment" in *Narusawa* does not meet Appellant's claimed feature wherein

attaching means has a pair of attachment rails (i.e., 33c) straddling said spindle and extending in parallel with the same at the two sides of a motor housing and a plane including said pair of attachment rails intersects with a circular orbit of an outermost point of the eccentric weight at two points, as recited in claim 35.

In order to explain Applicant's claimed feature directed to "a plane including said pair of attachment faces" recited in independent claim 29 and "a plane including said pair of attachment rails" recited in independent claim 35, Applicant provides below a marked-up Fig. 3 of the present invention and a marked-up Fig. 1C of *Narusawa*.

As shown in Applicant's marked-up Fig. 3, a plane, which is called "S" for the sake of convenience, includes a pair of attachment faces", while *Narusawa's* marked-up Fig. 1C shows the plane "S" that only intersects the pair of spring pieces 33 (i.e., "attachment faces" 33) but does not include the pair of spring pieces 33.

Furthermore, the spring pieces 33 of *Narusawa*, being curved and extending substantially vertically in relation to the circuit board onto which it is mounted, do not and cannot lie in the same plane so as to be included in a single plane as is the case with Appellant's claimed invention.

Fig. 3 of the present application

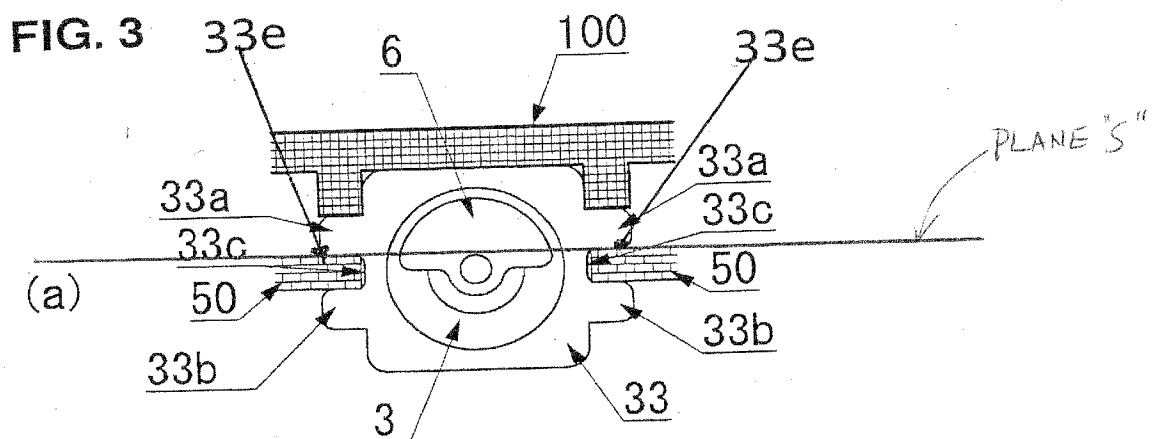
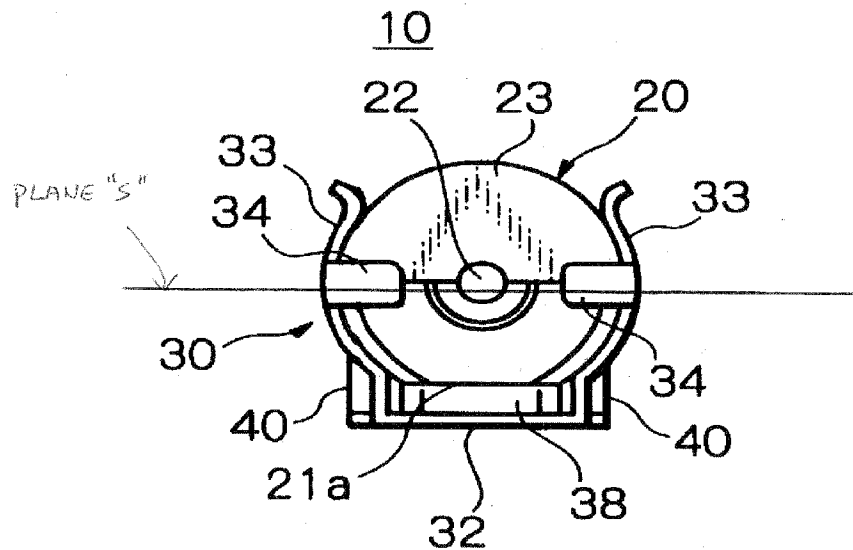


Fig. 1C of Narusawa

Fig. 1C



Appellant respectfully submits that the presently claimed invention is similar to that of *Takagi*, and that claim 29 of the present application is identical to claim 1 of *Takagi*. Therefore, Appellant's claimed features naturally correspond to a number of features described in *Takagi*.

Appellant respectfully notes that Fig. 7 and col. 4, lines 6-10 of *Takagi* shows a plane S that correspond to Appellant's aforementioned claimed feature wherein attaching means has a pair of attachment faces straddling said motor shaft and extending in parallel with the same at the two sides of a motor case and a plane including said pair of attachment faces intersects with a circular orbit of the outermost point of the eccentric weight at two points, as recited in claim 29, for example.

Accordingly, Appellant respectfully requests reversal of the §102(a) rejection of independent claims 29, 30, and 35 and 36.

C. The *Narusawa* patent does not anticipate dependent claims 30 and 36

Reversal of the rejection of claims 30 and 36 is respectfully requested on the basis that *Narusawa* fails to describe of each and every element recited in claims 30 and 36. Appellant respectfully asserts that the arguments set forth above in relation to the independent claims 29 and 35, from which claims 30 and 36 respectively depend, are also applicable to the rejection of claims 30 and 36.

That is, *Narusawa* fails to describe attaching means having a pair of attachment faces straddling said motor shaft and extending in parallel with the same at the two sides of a motor case and a plane including said pair of attachment faces (i.e., 33e) intersecting with a circular orbit of the outermost point of the eccentric weight at two points, as is required by independent claim 29, as well as by its respective dependent claim 30.

Narusawa further fails to describe the attaching means having a pair of attachment rails straddling said spindle and extending in parallel with the same at the two sides of a motor housing and a plane including said pair of attachment rails intersecting with a circular orbit of an outermost point of the eccentric weight at two points as recited in claim 35, as well as by its respective dependent claim 36.

Accordingly, Appellant respectfully requests reversal of the §102(a) rejection of dependent claims 30 and 36.

D. Claimed features supported by original drawings

Notwithstanding the prior art rejection over *Narusawa* discussed above, the Examiner contends that the feature upon which Applicant relies on are not being supported by the specification and not being recited in the rejected claim. Specifically, in a 35 U.S.C. §112, 2nd paragraph detailed in the Office Action mailed

July 28, 2008, the Examiner contends that the claimed attachment means and pair of attachment faces/rails of independent claims 29 and 35 are not originally disclosed and are not a part of the vibration motor. In response, Appellant respectfully notes that Figs. 3 and 4 have been amended in the Amendment filed May 29, 2008 to provide numerical labels of originally shown in the drawings, and the specification has been amended in the Amendment filed November 5, 2009 to provide detail description for the amended features in the drawings without adding new matter.

According to MPEP 2173.02, it is stated that definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teaching of the prior art; and
- (C) The claim interpretation that would be given one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

Further, to MPEP 2173.02 also states that a claim term that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible, and that acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

As correctly understood by the Examiner, the limitation motor body includes housing case 3 or 13. Therefore, as independent claims 29 and 35 positively recites a vibration motor comprised of a motor body, and as supported in previously amended Figs. 3 and 4, Appellant respectfully submits that the attachment means with the pair of attachment faces/rails in fact are a part of the vibration motor without any ambiguity or lack of support as alleged by the Examiner.

VIII. Conclusion

For the reasons set forth above, claims 29, 30, and 35 and 36 of the pending application define subject matter that is not anticipated under 35 U.S.C. § 102(a) in view of the *Narusawa*. Accordingly, reversal of the rejection of claims 29, 30, and 35 and 36, as well as the objection to claims 31-34 and 37-40, is respectfully requested.

The Office is authorized to charge any additional fees associated with this communication to Deposit Account No. 50-4525.

Respectfully submitted,

/Donald R. Studebaker/
Donald R. Studebaker
Reg. No. 32,815

Studebaker & Brackett PC
1890 Preston White Drive
Suite 105
Reston, Virginia 20191
Phone: (703)390-9051
Fax: (703)390-1277

IX. CLAIMS APPENDIX

1-28. (Canceled)

29. (Previously Presented) A vibration motor comprised of a motor body, a motor shaft projecting from the motor body, an eccentric weight attached to the motor shaft, and an attaching means for supporting said motor body in a horizontal prone posture at one surface of a board, wherein the attaching means has a pair of attachment faces straddling said motor shaft and extending in parallel with the same at the two sides of a motor case and a plane including said pair of attachment faces intersects with a circular orbit of the outermost point of the eccentric weight at two points.

30. (Previously Presented) A vibration motor as set forth in claim 29, wherein parts of said pair of attachment faces are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

31. (Previously Presented) A vibration motor as set forth in claim 29, wherein a distance between a center point of a line connecting said two points and a point where a diametrical line of said circular orbit passing through that center point intersects said circular orbit in a normal direction at a plane including said pair of attachment faces is at least the radius of said circular orbit and not more than the sum of said radius and the thickness of said board.

32. (Previously Presented) A vibration motor as set forth in claim 29, wherein: said motor body has an end cap for closing an opening of said motor case at the side opposite to said eccentric weight and a pair of external connection terminal pieces attached to said end cap, said attaching means has a pair of legs straddling said motor case in its thickness direction, a leg connecting part connecting said pair of legs on said motor case, and feet formed at the bottom of said legs, and said attachment faces are the back surfaces of said feet.

33. (Previously Presented) A vibration motor as set forth in claim 32, wherein said feet are formed by bending the bottom ends of said legs outward.

34. (Previously Presented) A board mounting structure of a vibration motor comprised of a vibration motor as set forth in claim 29 and a board provided with a cutaway space or an open space, wherein a pair of attachment faces of said vibration motor is affixed to one surface of said board at the sides of said cutaway space or said open space, and said vibration motor is mounted with at least said motor body in a state sunken in said cutaway space or said open space.

35. (Previously Presented) A vibration motor comprised of a motor body, a motor housing, a spindle projecting from the motor housing, an eccentric weight attached to the spindle, and an attaching means for supporting said motor housing in a horizontal prone posture at one surface of a board, wherein the attaching means has a pair of attachment rails straddling said spindle and extending in parallel with the same at the two sides of a motor housing and a plane including said pair of attachment rails intersects with a circular orbit of an outermost point of the eccentric weight at two points.

36. (Previously Presented) A vibration motor as set forth in claim 35, wherein parts of said pair of attachment rails are positioned closer to said eccentric weight side than a center of gravity of said vibration motor itself.

37. (Previously Presented) A vibration motor as set forth in claim 35, wherein a distance between a center point of a line connecting said two points and a point where a diametrical line of said circular orbit passing through that center point intersects said circular orbit in a normal direction at a plane including said pair of attachment rails is at least the radius of said circular orbit and not more than the sum of said radius and the thickness of said board.

38. (Previously Presented) A vibration motor as set forth in claim 35, wherein: said motor has a terminal blade mount for closing an opening of said motor housing at the side opposite to said eccentric weight and a pair of external connection terminal blades attached to said terminal blade mount, said attaching means has a pair of legs straddling said motor housing in its thickness direction, a leg connecting part connecting said pair of legs on said motor housing, and feet formed at the bottom of said legs, and said attachment rails are the back surfaces of said feet.

39. (Previously Presented) A vibration motor as set forth in claim 38, wherein said feet are formed by bending the bottom ends of said legs outward.

40. (Previously Presented) A board mounting structure of a vibration motor comprised of a vibration motor as set forth in claim 35, and a board provided with a cut-out or an open space, wherein a pair of attachment faces of said vibration motor are affixed to one surface of said board at the sides of said cut-out or said open space, and said vibration motor is mounted with at least said motor housing in a state sunken in said cut-out or said open space.

X. EVIDENCE APPENDIX

There are no copies of evidence entered and relied upon in this appeal of the pending application.

XI. RELATED PROCEEDINGS APPENDIX

There are no related proceedings or decisions rendered by a court or the Board of Appeals in any proceeding identified in the related appeals and interferences section in the pending application.